

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A rewritable optical record carrier comprising a recording stack of layers in the following order:

a first dielectric layer having a thickness at a first amorphous reflection minimum;
a recording layer comprising a phase-change recording material;
a second dielectric layer; and
a mirror layer deposited onto the second dielectric layer side of the recording stack,
wherein a thermal barrier layer is arranged adjacent to said first dielectric layer opposite the mirror layer to reduce heat dissipation emanating from the recording layer and passing through the first dielectric layer thus allowing the thickness of the first dielectric layer to be chosen at said first amorphous reflection minimum, and

wherein light entering the stack penetrates the thermal barrier layer, the first and second dielectric layers and the recording layer

wherein the major component of the thermal barrier layer is different from the components or mixtures of the first dielectric layer materials.

2. (Previously Presented) The rewritable optical record carrier as claimed in claim 1, wherein the rewritable optical record carrier further comprises a substrate carrying said stack of layers having said thermal barrier layer arranged between said first dielectric layer and said substrate.

3. (Previously Presented) The rewritable optical record carrier as claimed in claim 2, wherein the refraction index of said thermal barrier layer is close to the refraction index of said substrate.

4. (Previously Presented) The rewritable optical record carrier as claimed in claim 1, wherein the rewritable optical record carrier further comprises a cover layer attached to said thermal barrier layer.

5. (Previously Presented) The rewritable optical record carrier as claimed in claim 4, wherein the refraction index of said thermal barrier layer is close to the refraction index of said cover layer.

6. (Previously Presented) The rewritable optical record carrier as claimed in claim 2, wherein said substrate material is polycarbonate or PMMA.

7. (Previously Presented) The rewritable optical record carrier as claimed in claim 4, wherein said cover layer material is polycarbonate or transparent polymer resin.

8. (Previously Presented) The rewritable optical record carrier as claimed in claim 1, wherein said thermal barrier layer material comprises SiO_2 or Al_2O_3 as a major component.

9. (Previously Presented) The rewritable optical record carrier as claimed in claim 1, wherein said first and second dielectric layer materials comprise one of the following components or a mixture thereof: ZnS, SiO₂, Si₃N₄, Al₂O₃ or Ta₂O₅.

10. (Previously Presented) The rewritable optical record carrier as claimed in claim 1, wherein said phase-change recording material comprises a mixture of Ge, In, Sb, and Te.

11. (Previously Presented) The rewritable optical record carrier as claimed in claim 1, wherein said first dielectric layer thickness d_1 can be represented as:

$$d_1 = (m \cdot \lambda) / (2 \cdot n)$$

where m is an integer, λ denotes the wavelength of the laser light, and n is the refractive index of the first dielectric layer material.

12. (Previously Presented) The rewritable optical record carrier as claimed in claim 11, wherein said amorphous and a crystalline reflection has minimum and maximum levels at certain d_1 values.

13. (Previously Presented) The rewritable optical record carrier as claimed in claim 12, wherein said amorphous reflection has a minimum level at a d_1 value when $m=1$.